

C538397

APPARATUS AND METHOD FOR FIXTURE MEDIA
INDEPENDENT INTERFACE COMMUNICATIONS BY
CORRUPTING TRANSCRIPT DATA ON SELECTED
REPEATER PORT

ABSTRACT OF THE DISCLOSURE

An arrangement for secure repeater communication in an IEEE 802.3 network by transmitting transmit data and a transmit enable signal on a selected repeater port based on an address lookup table in the repeater core. The other repeater ports that do not have a network address corresponding to the destination address of data packet receive corrupted data generated in response to signals from the respective repeater ports. The repeater ports cause generation of corrupted data by concurrently outputting an asserted transmit error signal and an unasserted transmit enable signal on the corresponding media independent interface. A physical layer transceiver, upon detecting the concurrent assertion of the transmit error signal and the deassertion of the transmit enable signal on the media independent interface, selectively outputs a prescribed data pattern as the transmit data to the network node. The prescribed data pattern may also be output to a secondary media independent interface, which receives a modified transmit enable signal. Hence, network nodes receiving the corrupted transmit data interpret the corrupted transmit data as a valid data packet for another network node, as opposed to symbol errors. Hence, network data can be transmitted along secure repeater ports without generation of an artificially high number of symbol errors.

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